

TWISTYSCAN

The TwistyScan is the new reader of SpringCard. It is composed of the TwistyWriter TTL, 232, 485, USB and of a 2D reader for barcodes. The TwistyScan is able to read barcodes, NFC tags and RFID labels.

KEY FEATURES

Interoperability : TwistyScan is not only able to read serial numbers from virtually any 13.56 MHz contactless card but it is also able to read any barcode presented in front of it.

All-in-one : TwistyScan is composed of a 2D reader and of the TwistyWriter TTL, 232, 485, USB allowing different kind of cards to be used at the same time on the TwistyScan.

Security : TwistyScan is able to communicate with NXP DESFire, to verify a numeric signature and to identify it for state-of-the-art security level.

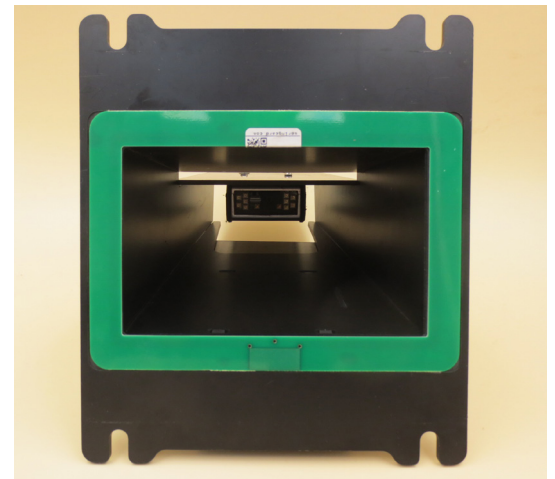
The TwistyScan embed also a SAM module.

A FEW TYPICAL APPLICATIONS

- People and objects identification
- Double identification (Barcode and NFC/RFID tags, labels)

SPRINGCARD

Proudly designed and manufactured in France, SpringCard products are distributed worldwide. With 18 years experience and millions of users, SpringCard is your expert in RFID and NFC solutions.



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TWISTYSCAN

PIN Assignment TTL				
PIN	NAME	Type	Description	Remark
1	RFU		Not used	Must be left unconnected
2	/FLASH	IN	Firmware upgrade	Internal pull-up Can be left unconnected
3	GND	Ground	Ground	
4	/RESET	IN	Module reset	Internal pull-up Can be left unconnected
5	VCC	Power	Power supply	
6	RX (TTL)		Serial interface	Host to module
7	TX (TTL)		Serial interface	Module to host
8	GND	Ground	Ground	

PIN Assignment RS-232				
PIN	NAME	Type	Description	Remark
1	RFU		Not used	Must be left unconnected
2	/FLASH	IN	Firmware upgrade	Internal pull-up Can be left unconnected
3	GND	Ground	Ground	
4	/RESET	IN	Module reset	Internal pull-up Can be left unconnected
5	VCC	Power	Power supply	
6	RX (RS-232)		Serial interface	Host to module
7	TX (RS-232)		Serial interface	Module to host
8	GND	Ground	Ground	

PIN Assignment RS-485				
PIN	NAME	Type	Description	Remark
1	RFU		Not used	Must be left unconnected
2	/FLASH	IN	Firmware upgrade	Internal pull-up Can be left unconnected
3	GND	Ground	Ground	
4	/RESET	IN	Module reset	Internal pull-up Can be left unconnected
5	VCC	Power	Power supply	
6	Bus A		Serial interface	Host to module
7	Bus B		Serial interface	Module to host
8	GND	Ground	Ground	

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TECHNICAL SPECIFICATIONS

Contactless smartcard interface

Standards	ISO/IEC 14443 A and B, T=CL ISO/IEC 15693 , 18092 and 21481
RFID carrier	13.56 MHz
Operating distance	up to 6 cm depending on card and on environment
Card baud rate	106 kbit/s (14443) 26 kbit/s (15693)
Supported cards (partial list)	<ul style="list-style-type: none"> ▪ ST MicroElectronics SR, SRI, SRIX families ▪ ASK CTS256/CTS512 And virtually any ISO/IEC 14443 A or B compliant smartcard, or ISO/IEC 15693 compliant RFID label

Environment and safety (TwistyWriter TTL, 232, 485)

Operating temperature	-20 → +70°C
Storage temperature	-20 → +70°C
Power supply	3 to 5V DC
Consumption	average 130mA (at 12V DC) peak: 250mA (at 12V DC)
MTBF	500 000 hours
CE mark	EN300330-2 V1.6.1 / EN300330-1 V1.8.1 / EN 301489 -1 : V1.9.2 / EN 301489 -3: V1.6.1
Other standards	RoHS

SAM Interface

1 ID-000 mini SAM slot integrated on main board	
Standards	ISO 7816 (3 and 4) Supporting both T=0 and T=1 protocols and Calypso HSP
Smartcard class	5V, 3V or 1.8 cards supported (class A, B or C)
Clock frequency	4MHz
Card baud rate	up to 115200 bps

USB

Baud rate	38400 or 115200bps
Output format	Hexadecimal string, 4 to 16 bytes

Hardware specifications

Dimensions	110 x 180 x 188 mm (approx)
Housing material	PS (3mm)
Color	Black
Weight	≈ 240g

ORDER CODES

PART #	Description
SC18153	TwistyScan-232
SC16225	TwistyScan HSP (USB)
SC18127	TwistyScan TTL

PRECAUTIONS FOR INSTALLATION

This device is a contactless reader; it uses inductive coupling (magnetic field) to power the cards and communicate with them. Precaution must be taken to keep the reader far from any source of perturbation (e.g. other readers, computers...). Installing the reader near a metal surface (aluminium or steel plate...) will lead to shorter operating distance and increased power consumption. SpringCard has a long experience installing contactless couplers in various kind of devices. Do not hesitate to contact us if you need any assistance.

SPRINGCARD COMPANY WITH A CAPITAL OF 227 000 €
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